DETAILED ACTION

This Office Action is in response to the communication filed on 6/29/09. Applicant's arguments have been considered, but are moot in view of the new grounds of rejection. Claims 1-4, 6-9, 11, 12, 15-18 and 20 are pending. This Action is FINAL.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claims Analysis

The claims have been amended to recite the carbon black consists essentially of particles having an aspect ratio of 1.0 to 5.0 and a largest particle size of 10 μm or less. On page 7 of the specification as filed, the term "particle" and/or "particles" of carbon black include primary particles and secondary particles. Thus, all primary particles of carbon black and all secondary particles of carbon black must have the claimed aspect ratio and particle size.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-4 and 8-9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims improperly broaden claim 1 from which they depend.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-9, 11, 12, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh et al., US 2002/0055047 A1 as evidenced by Takami et al., US 5,753,387.

Satoh teaches a nonaqueous electrolyte secondary battery comprising a positive electrode, a negative electrode and a nonaqueous electrolyte. The negative electrode contains a carbonaceous material capable of absorbing-desorbing lithium ions (abstract). The carbonaceous material contained in the negative electrode is at least 90 parts by weight of carbonaceous material A having an average layer spacing d002 obtained by X-ray diffraction of 0.337 nm or less and 1-10 parts by weight of carbonaceous material B having an average layer spacing d002 obtained by X-ray diffraction of at least 0.36 nm (0062). Carbonaceous material A is a graphitized material (0093). Carbonaceous material B is obtained by applying a heat treatment at 900˚C or less to a carbonaceous material precursor. The carbonaceous material precursor may be isotropic pitch (0095). Isotropic pitch is a non-graphitizable carbon precursor (amorphous carbon). This is evidenced by Takami (US5,753,387) at column 8, lines 29-36. It is desirable for each of carbonaceous materials A and B to have an aspect ratio not smaller than 0.1 and smaller than 4 (0097). Carbonaceous material B may have a particle size of 8 μm (examples). The negative electrode includes a binder such

as styrene-butadiene rubber (SBR) and carboxymethyl cellulose (CMC) wherein the binder is 2-20 wt% (0100-0101). The negative electrode may have a density of 1.35 g/cm^3 (0201). Carbonaceous material A has a specific surface area between 0.1-3 m^2/g (0098).

Takami does not explicitly state carbonaceous material B is carbon black. However, the invention as a whole would have been obvious to one having ordinary skill in the art because Satoh at least suggests carbonaceous material B may be carbon black. Satoh teaches carbonaceous material B is obtained from a non-graphitizable carbon precursor (isotropic pitch). Therefore, carbonaceous material B is an amorphous carbon material (evidenced by Takami). Furthermore, a carbon material having a d002 layer spacing obtained by X-ray diffraction of at least 0.36 nm or more at least suggests to one of ordinary skill in the art that carbonaceous material B is carbon black/amorphous material. Graphite has a d002 layer spacing obtained by X-ray diffraction of about 0.335 nm. Examiner points to the present specification that states ""carbon black" means amorphous carbon" (page 8, lines 15).

Response to Arguments

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is 571-272-1285. The examiner can normally be reached on Monday-Thursday (9:00-7:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/TRACY DOVE/

Primary Examiner, Art Unit 1795

November 2, 2009